



# **Island Water-Related Hazards**

**(Updated 5 April 2012)**



# Topics to be Covered

- Drowning **Capital** of the USA
- Ocean Hazards
- Hazards from Currents
- “Swept of the Ledge” Hazards
- Body Surfing and Diving into Waves Hazards
- Dangerous & Best Beaches
- Safe Surfing
- Kayaking Safety
- Ocean Safety Signage
- Snorkeling Safety
- SCUBA Safety
- Marine Life Safety

**IF IN DOUBT, KEEP OUT**



# Hawaii **IS** the Drowning Capital of the USA

**More people die from drowning in Hawaii than any other state in the US**

- Hawaii's miles of guarded and unguarded beaches are used by millions of tourists and locals each year, virtually 365 days of the year.
- Tourists, newly arrived DoD personnel and dependents are generally unaware of the hazards the waters in these beautiful islands present.
- Even experienced islanders sometimes over-estimate their abilities or make the mistake of turning their back on the ocean and find themselves swept in. The ocean treats everyone the same!!!
- In Hawaii, approximately sixty-one (61) persons - residents, military, and visitors - drown each year. 71 people drowned in Hawaii in 2004.
- **This presentation is designed to help you learn how to protect yourself and your loved ones so you can enjoy Hawaii, SAFELY.**
- [http://www.nytimes.com/2006/08/26/us/26hawaii.html?\\_r=1](http://www.nytimes.com/2006/08/26/us/26hawaii.html?_r=1)



# Hawaii **IS** the Drowning Capital of the USA

**ONE Search of the internet “Drowning in Hawaii”**

- POSTED: 2029, Dec 11, 2011 Honolulu Medical Examiner (HME) identified 40-yo man who died Sunday morning in an apparent drowning on the North Shore
- The man was swimming with a woman in waters off Ke Iki Beach on the North Shore, when they both got into trouble and called for help. Bystanders were able to bring the woman safely to shore. However, when they returned to help the man, he was floating unconscious, officials said. The bystanders performed CPR until HFD and EMS personnel arrived. The man was taken in critical condition to the hospital, where he later died.
- POSTED: 1551, Feb 24, 2012 A 47-year-old Honolulu man drowned Thursday while surfing with friends at Rocky Point Lefts on the North Shore.
- Other surfers found Hutchings in the water with no pulse and no breath and brought him to shore about 1 p.m., said Ocean Safety Division Operations Chief Jim Howe. Lifeguards responded to a 911 call and began CPR before paramedics took Hutchings to Wahiawa General Hospital. Police said Hutchings was surfing with friends and there were no signs of foul play.
- POSTED: 0728, Sep 13, 2010 The HME identified a man who apparently drowned while night diving off of Mokolii Island Saturday night. ST, 42, of Honolulu, got into trouble in the waters off Kualoa Regional Park and was brought to shore by fellow divers at about 9:47 p.m., officials said.
- His friends performed cardiopulmonary resuscitation beside Kamehameha Highway until paramedics arrived.
- Paramedics pronounced Tominino dead at the scene at 10:47 p.m., an EMS spokesman said.



# Hawaii **IS** the Drowning Capital of the USA

**ONE Search of the internet “Drowning in Hawaii”**

- POSTED: 08:20 a.m. HST, Dec 06, 2011 HME found that a 45-year-old man of Honolulu, drowned while diving at night in waters off Kahana Bay Friday night.
- The man was skin diving with his son when they got caught in a current. The son was able to make it to shore, but the current swept his father out to sea. A HFD helicopter dropped rescue personnel into the water who were able to retrieve the man.
- POSTED: 1117, Sep 05, 2011 The HME identified a man whose body was found in waters off Maili Saturday as HM, 32, of Honolulu.
- Honolulu Fire Department rescue personnel recovered Moulton's body. He was pronounced dead at the scene.
- POSTED: 1003, Feb 24, 2012, The HME identified the Japanese tourist who drowned while snorkeling off Heeia Kea pier as 67-year-old IK.
- From Tochigi, drowned after diving off a tour boat in waters off Heeia Kea Pier. EMS personnel met the boat at the pier about 11:13 a.m. He was pronounced dead at the scene, police said. The HME classified his death as accidental.
- POSTED: 2052, Nov 16, 2010 A 76-year-old Honolulu woman who drowned at a Waikiki beach this weekend was identified today.
- The HME identified the woman and said an autopsy concluded she drowned in an accident. Police said an anonymous caller reported people doing CPR on a woman on the beach near Waikiki Outrigger on the Beach shortly before 7 p.m. Saturday.
- Kitay died at Straub Clinic & Hospital less than an hour later.



# Drowning Capital of the USA

## **8th TSC Drownings on Oahu**

- Two USARPAC Soldiers drowned on 2 September 2011 at approximately 1100 local at Kualoa Beach Park near Kaneohe, Hawaii. Four Soldiers were caught in a high tide while trying to wade back to shore from Chinaman's Hat, when they ran into trouble. 26 years old PVT and 27 year old SGT drowned. Remaining two Soldiers (26-year-old SPC, and 29-year-old SGT) were rescued by kayakers and treated. The surviving SGT recovered from near-drowning in the hospital.
- The Safety Investigation found the following contributing factors;
  - Extremely limited experience around the ocean, first time for three Soldiers & 2<sup>nd</sup> for other.
  - Two Soldiers were very weak swimmers, one was a non-swimmer. The drown PVT was a strong swimmer but was likely overcome by the exertion required to assist panicked SMs.
  - No comprehension of the hazards the walk to Chinaman's Hat presented.
  - Despite hesitancy in the group to start the walk due to ocean conditions, they still went.
  - Did NOT complete a risk assessment (CRM) for the walk, did not have beach shoes and did not have water survival skills equal to the ocean conditions at hand.



# Drowning Capital of the USA

## **8<sup>th</sup> TSC Drownings on Oahu**

- An 8th TSC, USARPAC, Schofield Barracks, Hawaii, Soldier died in a drowning accident on 28 November 2009 at approximately 1900 local in Oahu, Hawaii. The 31-year-old SPC had been snorkeling with her family members in shallow water when they lost sight of her momentarily. She was discovered unresponsive and taken to a local medical center where she was pronounced deceased. The Soldier had returned from deployment a few months earlier.
- The Safety Investigation found the following contributing factors:
  - Snorkeling in an “Out-of-Bounds” un-guarded section of beach at dusk.
  - Extremely limited snorkeling experience and not a strong swimmer.
  - Snorkeling at dusk, without any lights.
  - No comprehension of the requirements to snorkel safely in the conditions present.
  - Likely did NOT complete her risk assessment (CRM) for the snorkeling .



# Ocean Hazards In the News

- Feb 29, 2004 - Schofield Soldier swept to Sea at Waimea Bay After MIDNIGHT
- The woman was one of six Soldiers taking pictures along the beach when a large wave came in and swept the group into the ocean.
- The other Soldiers swam safely back to shore, the female Soldier was not seen again.
- A search of the ocean by lifeguards failed to locate the Soldier.
  
- Still MORE incidents
- Big Wave Sweeps Fisherman Off Cliffs
- Chicago Man Drowns Off Kauai Beach
- Swimmer Drowns at Marine Corps Base Hawaii Beach
- Surfer Swept Out To Sea
- Man Dead After Boat Capsizes at Turtle Bay
- Pair Lost in Small Boat Off Chinaman's Hat



# Ocean Hazards In the News



STAR-BULLETIN

## May 8, 2006 - CG ends search for boys lost off Kauai

- **The Coast Guard suspended a search yesterday for two boys who were swept out to sea by strong rip currents off of Kauai's eastern shoreline.**
- **At about noon Saturday, a 9-year-old boy from Colorado and his 8-year-old brother ran into trouble while swimming at Nukolii Beach. Their mother, 32, grabbed her younger son but was unable to reach her older son.**



# Ocean Hazards In the News



COURTESY OF THE WHITE FAMILY AND KITV4 NEWS

Drowning victim Jennifer White is shown in a family portrait that includes her rescued son, Aaron, 8, right, and other son, Tyler, 9, who has not been found.

## **Mother dies after saving son on Kauai**

**The Colorado visitor saved her 8-year-old, but her 9-year-old has not been found (May 9, 2006)**

- **ANAHOLA, Kauai » Two days after saving one of her sons from drowning in Anahola Bay, Jennifer White of Gunnison, Colo., died yesterday at Wilcox Hospital.**
- **White, 32, rescued Aaron, her 8-year-old, from a rip current near the remnants of Anahola Pier at about noon Saturday. But when she went back for Tyler, her 9-year-old son, she had to be rescued by a bystander.**
- **White's son, Tyler, and 17-year-old John Dacuyucuy, a Kapaa High School student, have not been found since they disappeared in rough waters at separate beaches Saturday.**



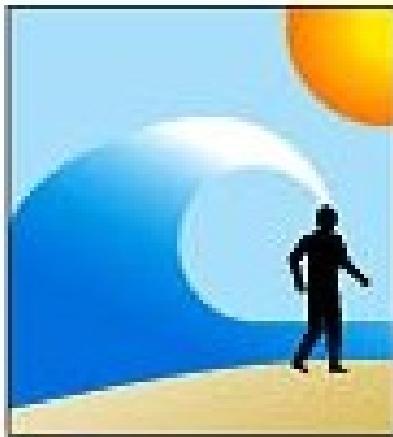
# Women Swept Off Ledge Drown



- **The five women were all smiles as they posed for a picture on a rock near Lanai Lookout between Hanauma Bay and Halona Blowhole yesterday morning, said Matthew Parker, who was taking the photo just before the biggest wave he had ever seen popped up and swept the group away.**
- **Wave warning signs were ignored – Never turn your back to the ocean in areas like this.**



# Island Ocean Hazards



## Shorebreak

**Hazard:** One of the two most important concerns is the shorebreak, where plunging waves hit the shore with great force.

**Tip:** Always face or turn toward the waves so you can avoid it. If knocked down, crawl out of the water rather than trying to walk up the beach.



## Strong currents

**Hazard:** Another important concern is the strong currents that develop as water from breaking waves must find its way back out of the surf zone.

**Tip:** If caught in a current, the swimmer should swim across the current to get out of it and then swim back to shore.



## Uprush

**Hazard:** The uprush is the water from incoming waves running up the beach after the wave has broken on the shore.

**Tip:** As with the shorebreak, always face the waves. Never allow small children to wander close to the uprush. They should be monitored closely so they are not pulled into the surf.



# More Island Ocean Hazards



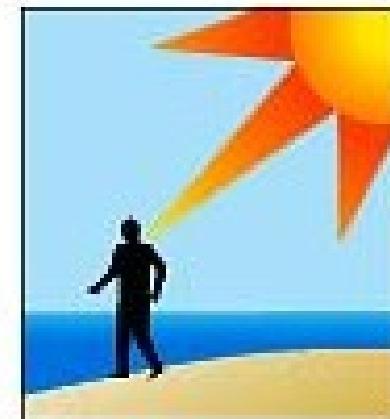
## Backwash

**Hazard:** *The backwash is uprush flowing back out to sea after the wave has broken on the shore.*  
**Tip:** *As with the uprush, never allow small children to wander close to the backwash.*



## Exposed reef

**Hazard:** *Exposed reef is an obvious danger.*  
**Tip:** *It should be avoided by keeping it in sight and staying well clear. Rocks or reef that are submerged also are a danger, and can be detected by watching for disturbed surf or dark shadows under the water.*



## Sun & wind

**Hazard:** *The combination of wind and sun at Sandy Beach is more intense than in many other parts of the island.*  
**Tip:** *Always drink plenty of fluids to avoid dehydration. Wear sunscreen, sunglasses and, whenever possible, a T-shirt and hat to stay cool.*



# Island Hazards - Blow Holes



Notice how no one is standing around the blowhole?  
Guess how much force is required to make water go that HIGH?



# Blowhole Hazards

## June 2001 - Divers Retrieve Blowhole Victim

- Fire rescue divers this morning retrieved the body of 18-year-old Daniel Dick, a tourist who was sucked headfirst into the Blowhole yesterday afternoon.
- Soto said Dick was straddling the blowhole yesterday at about 3:15 p.m. when water gushed through the rock formation and blasted him into the air. Dick then fell into the hole and disappeared with the receding water.
- As he straddled the blowhole, he was warned by a man nearby, "Don't do that," said Moses Soto, who saw the whole thing.
- "He went and did it anyway," Soto said.
- "When the water came up, it threw him in the air about this high, and the water just sucked him in," he said, motioning about 5.5 feet high.



# **Island Hazards - Blowholes**



**Honolulu Fire Department's Todd Hugo, top, turned away as water exploded out of the Blowhole yesterday. Firefighters were searching for Daniel Dick who was sucked into the hole. His body was eventually recovered.**



# Hazards from Currents



- Rip currents are powerful, currents of water flowing away from shore.
- They typically extend from the shoreline, through the surf zone, and past the line of breaking waves.
- Rip currents can be killers. The US Lifesaving Association estimates that annually over 100 deaths are caused by rip currents.
- Rip currents account for over 80% of rescues performed by lifeguards.
- The greatest safety precaution that can be taken is to recognize the danger of rip currents and always remember to swim at beaches with lifeguards.
- The United States Lifesaving Association has calculated the chance that a person will drown while attending a beach protected by USLA affiliated lifeguards at 1 in 18 million. If caught in a rip current at an unguarded beach, how you respond could make the difference between life and death.



# Hazards from Currents

## **Escaping a Rip Current**

- Depending on its severity, you may be able to see a rip current from the beach. Strong rip currents disrupt incoming waves and stir up sand from the ocean floor. When you're at the beach, keep an eye out for narrow, muddy streaks in the ocean where there aren't any waves breaking.
- If you get caught up in a rip current, your life depends on you remaining calm and rational.
- Your first instinct will likely be to swim back to shallow waters against the current,. In most cases, even if you're a strong swimmer, this will only wear you out.

### **The current is too strong to fight head-on.**

- Instead, swim sideways, parallel to the beach. This will get you out of the narrow outward current, so you can swim back in with the waves helping you along.
- If it's too hard to swim sideways while you're being dragged through the water, just wait until the current carries you past the sandbar. The water will be much calmer there, and you can get clear of the rip current before heading back in.

### **If caught in a rip current:**

**Remain calm to conserve energy and think clearly.**

**Never fight against the current.**

**Think of it like a treadmill that cannot be turned off.**

**Swim out of the current in a direction following the shoreline.**

**When out of the current, swim at an angle-away from the current-towards shore.**

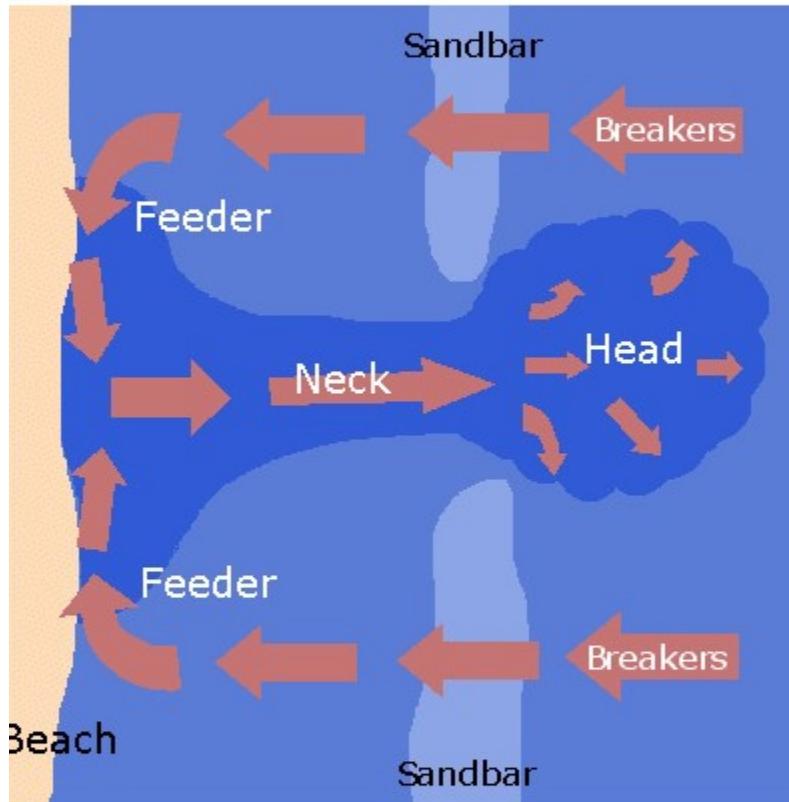
**If you are unable to swim out of the rip current, float or calmly tread water.**

**When out of the current, swim towards shore.**

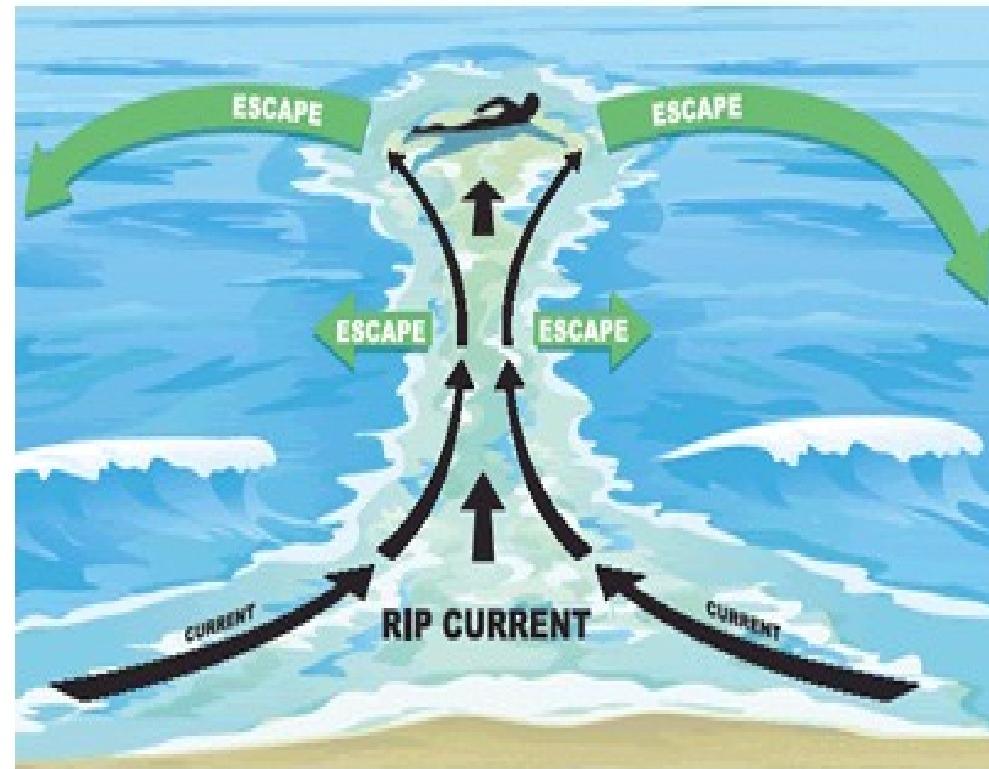
**If you are still unable to reach shore, draw attention to yourself by waving your arm and yelling for help.**



# Hazards from Currents



**Basic Rip Current Mechanics**





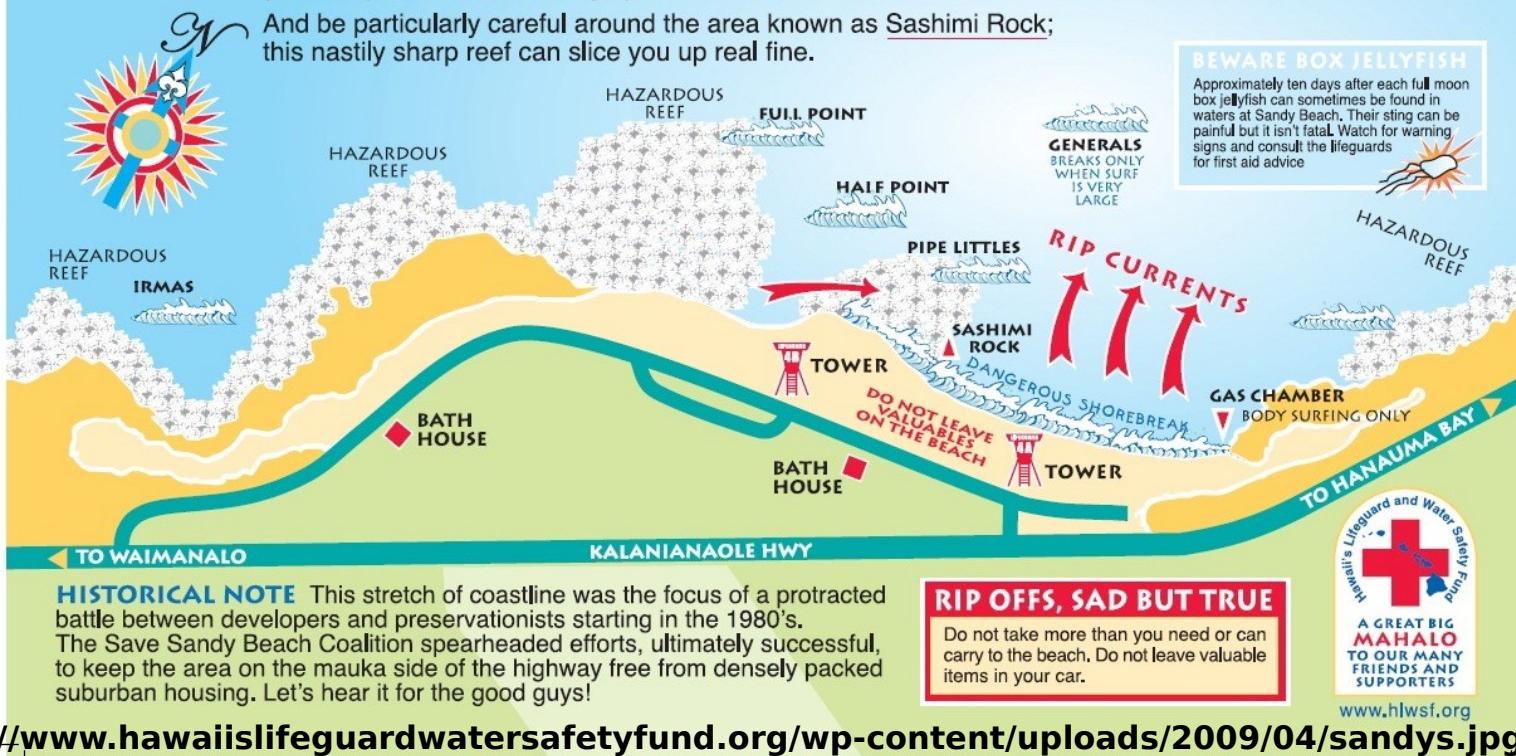
# Hazards from Currents

## SANDY BEACH SURF & SEA CONDITIONS A SURVIVAL GUIDE FOR SURFERS, SWIMMERS & BEACHGOERS



THIS IS one of O'ahu's most popular beaches, but also one of its deadliest. Be sure to consult with the lifeguards before venturing into the water, even if the ocean seems calm. When surf is up this spot can be extremely dangerous: the shorebreak can thump you into hard-packed sand and cause serious neck and back injuries. Rip currents can drag you straight out to sea. Unless you're an expert don't try to emulate the many young local surfers and bodysurfers you'll see in the water, they've probably had years of practice at this tricky spot.

And be particularly careful around the area known as Sashimi Rock; this nastily sharp reef can slice you up real fine.





# Hazards from Currents

## MAKAPU'U SURF & SEA CONDITIONS

### A SURVIVAL GUIDE FOR SWIMMERS, BEACHGOERS AND WATERPERSONS



THIS IS another beautiful but dangerous beach. Be sure to obey the signs the lifeguards have put out for your safety, and be sure to consult with them if in doubt. Sorry guys and gals, but NO SURFING is permitted; these waters are reserved for experienced swimmers and bodysurfers only. Note that the rip currents are tricky; depending on the direction of the swell the rip currents also change direction. Extreme caution is advised.



HAZARDOUS REEF

HAZARDOUS REEF

EAST SWELL RIP CURRENT

HAZARDOUS REEF

RIP CURRENT

NORTH SWELL RIP CURRENT

RIP CURRENT

DANGEROUS SHOREBREAK

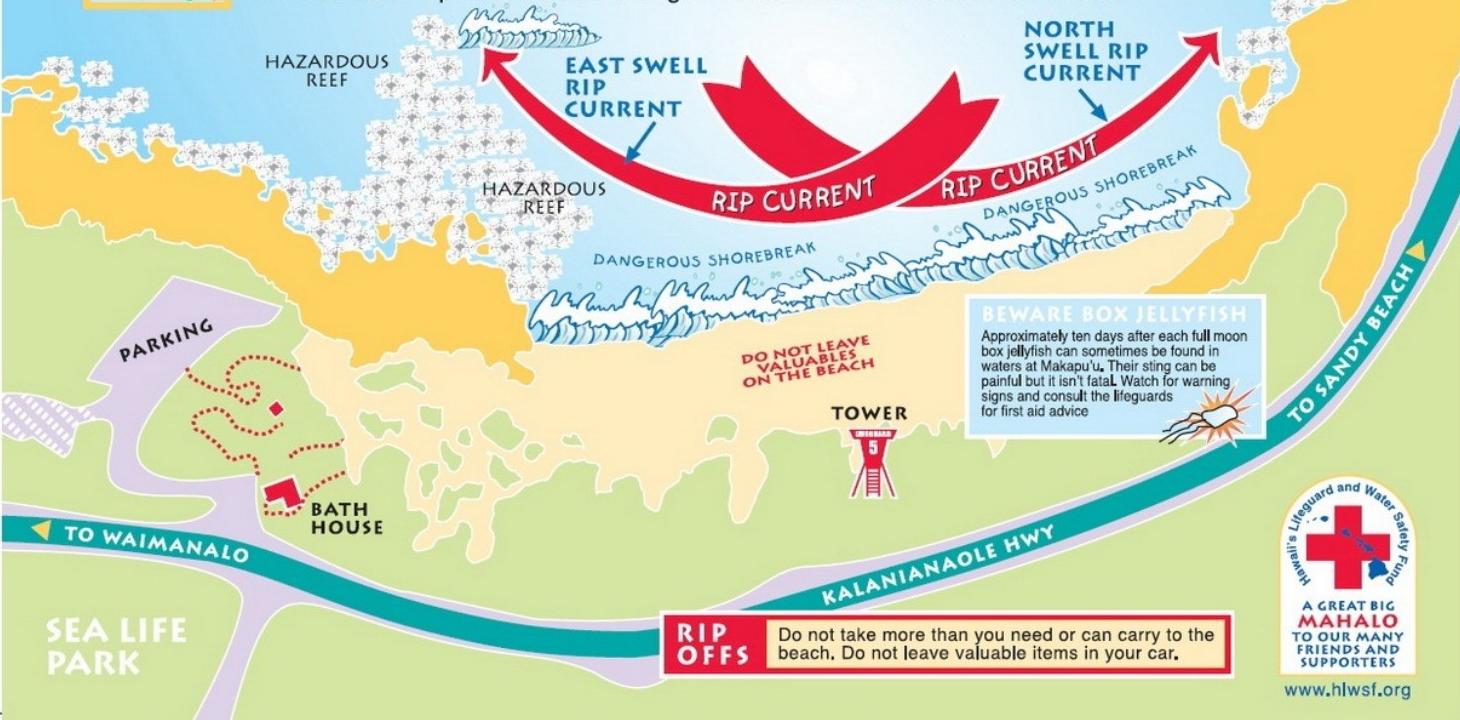
DANGEROUS SHOREBREAK

DO NOT LEAVE  
VALUABLES  
ON THE BEACH

TOWER

BEWARE BOX JELLYFISH

Approximately ten days after each full moon box jellyfish can sometimes be found in waters at Makapuu. Their sting can be painful but it isn't fatal. Watch for warning signs and consult the lifeguards for first aid advice.





# Hazards from Currents

## MAKAHA BEACH SURF & SEA CONDITIONS A SURVIVAL GUIDE FOR SURFERS, SWIMMERS, & WATERPERSONS

### WELCOME TO MAKABA

In the winter when the waves are up this is a popular beach for surfing, and at other times of the year for swimming, snorkeling and diving. The beautiful reef is home to a rich variety of sea-life, and turtles abound.

It was here that pioneering big wave surfers in the 1930's first tackled giant waves. Old-time surf legends Woody Brown, Wally Froiseth and Buzzy Trent all considered Makaha their playground, and for a while it was the center of the surfing universe, hosting in the 1960's the Duke Kahanamoku International Surfing Championships and other competitions. 'Buffalo' Keaulana's Big Board Surfing Classic still takes place here every March.

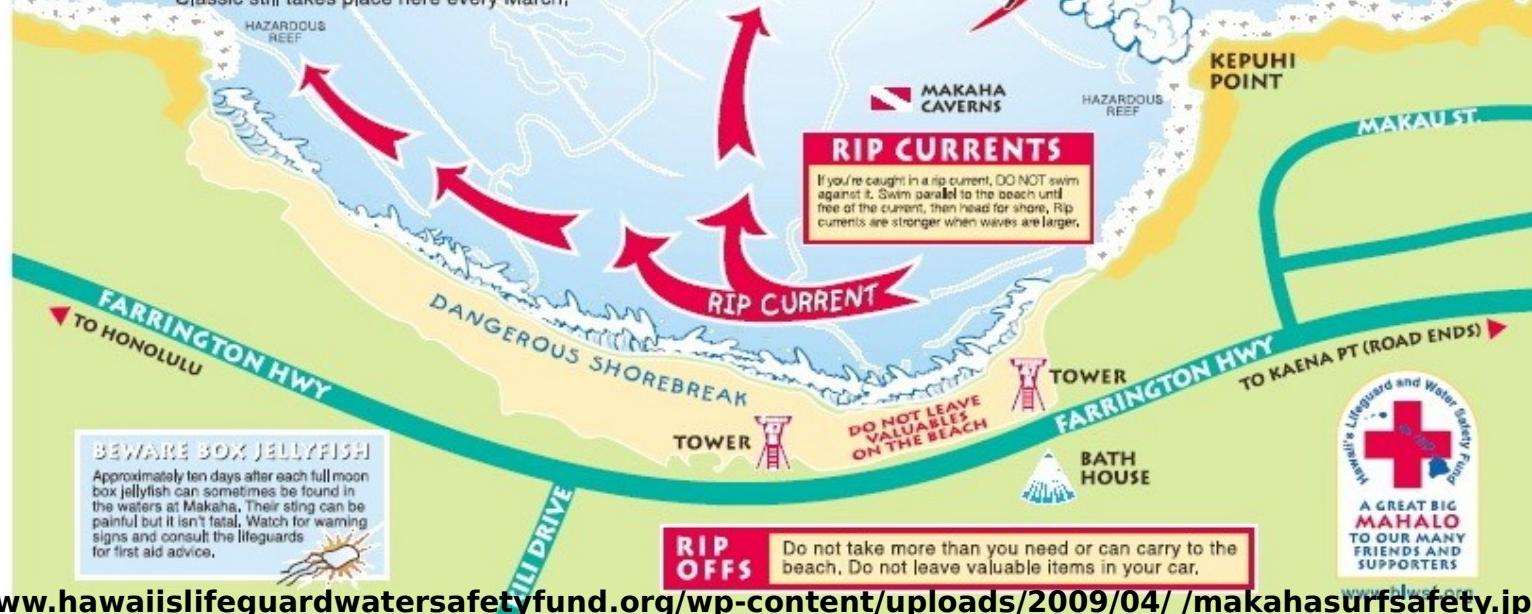
About 150 yards from the shoreline are the Makaha Caverns, a popular dive spot. Watch out for boats! Please consult with lifeguards about conditions before entering the water.

### SURFERS & SWIMMERS

Please be respectful of other people in the water. Stay out of the way of other surfers. Watch out for flying boards. Paddle around the breaking waves, and use a leash to keep control of your board at all times.

### HER GENTLE SPIRIT RULES

Rell Sunn, pioneering woman surfer, will forever be associated with Makaha. It was here that she organized the Menehune Surfing Contests for children and spent most of her too brief life. Radiant and beautiful, she impressed all who ever met by being the very embodiment of the Aloha Spirit - generous, accepting, loving.





# Hazards from Currents

## WAIKIKI SURF & SEA CONDITIONS A SURVIVAL GUIDE FOR SURFERS, SWIMMERS, & WATERPERSONS

**WELCOME** to the legendary waters of Waikiki, playground of Hawaiian royalty in olden days, and the spiritual home of the beautiful sport of surfing. It was here that the great Hawaiian hero Duke Kahanamoku, along with his beachboy friends, popularized the sport of surfing during the early 20th century amongst Hollywood stars and other visitors of the era.

**RIP CURRENTS**

If you're caught in a rip current, DO NOT swim against it. Swim parallel to the beach until free of the current, then head for shore. Rip currents are stronger when waves are larger.

**BEWARE THESE DANGEROUS RIP CURRENTS IN PARTICULAR:**

1. IN FRONT OF LIFEGUARD TOWER 2C, beyond the seawall.
2. IN FRONT OF LIFEGUARD TOWER 2A, to the left of the seawall.

**DUKE KAHANAMOKU HAWAIIAN HERO OLYMPIC SWIMMER SURFING LEGEND**

HOWEVER enchanting these fabled waters may seem, there are dangers and hazards to be aware of. Among these are:

1. **RIPTIDES**, particularly when the waves are large. Larger waves = stronger riptide.
2. **LOOSE SURFBOARDS** can kill. Use a leash. Watch out for flying boards.
3. **CORAL REEFS** cut you up. Avoid them. If you get cut treat wound promptly to prevent staph infection.
4. **BOATS, CANOES & CATAMARANS**. They're bigger than you and take the right of way. Be alert to what's heading in your direction.
5. **OTHER SURFERS** get in the way and might have attitude. Transcend and respect those more adept, as well as all others.

**DO NOT SWIM ACROSS CHANNEL: DANGEROUS BOAT TRAFFIC IN & OUT OF HARBOR**

**HOW TO BEHAVE IN THE WATER**

**THIS IS VERY IMPORTANT**

Please remember that "ALOHA" is the operative spirit in Hawai'i and "MAHALO" is the magic word. Be courteous to, and respectful of, all others in the water.

KE ALOHA NO! ALOHA!

**Hawai'i's Lifeguard and Water Safety Fund**

A GREAT BIG MAHALO TO OUR MANY FRIENDS AND SUPPORTERS

email: hlgwsf@gmail.com

<http://www.hawaiilifeguardwatersafetyfund.org/wp-content/uploads/2009/04/waikiki.jpg>

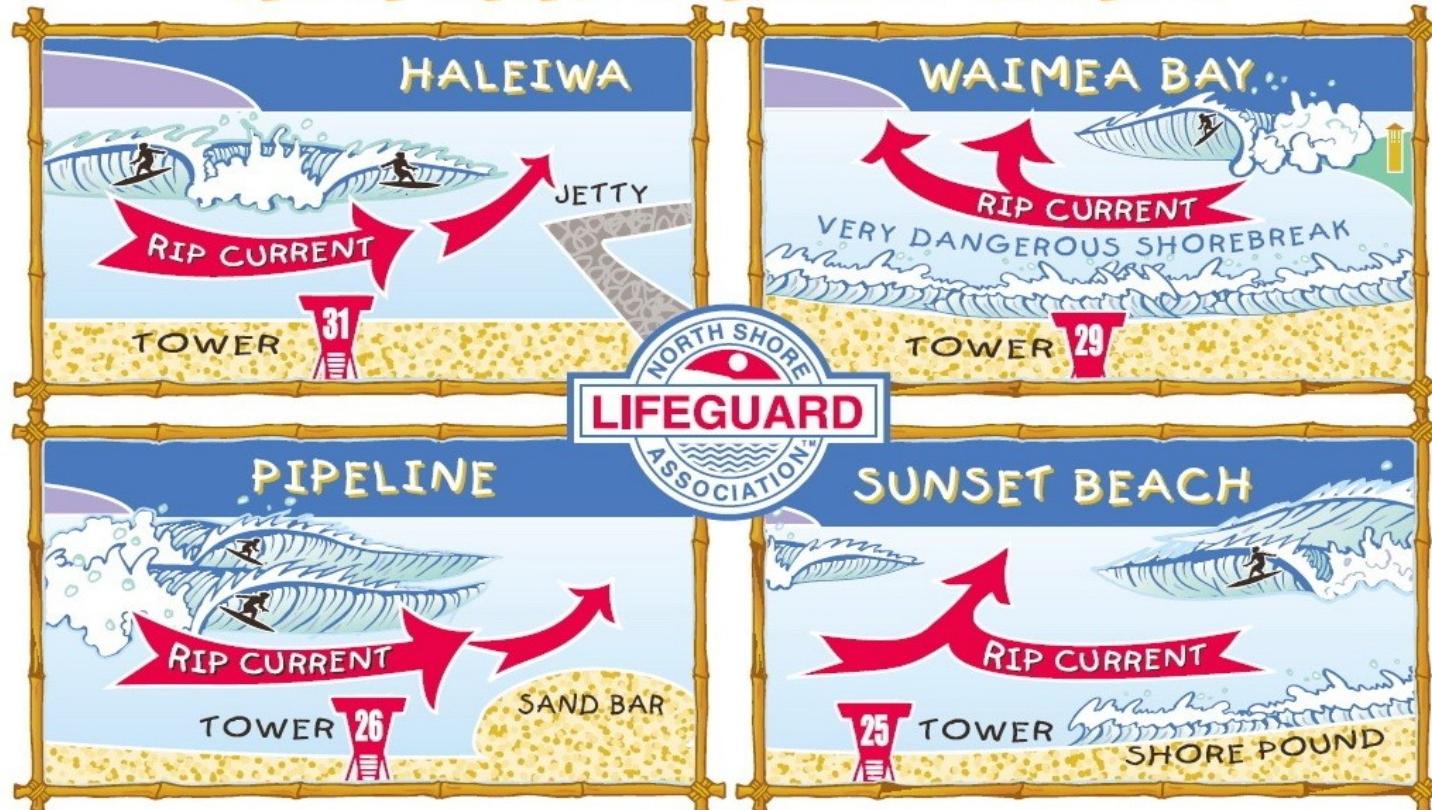
FOR OFFICIAL USE



# Hazards from Currents North Shore Surf Safety

For ALL surfers and beachgoers!

BEWARE THESE DANGEROUS RIP CURRENTS:



<http://www.hawaiilifeguardwatersafetyfund.org/wp-content/uploads/2009/03/nssurfsafety.jpg>

**FOR OFFICIAL USE**



# Waimea Bay Beach Park Jumping Rock

**Warning signs advise everyone of the dangers. Obviously these jump divers are taking a chance of serious injury by jumping off the rock.**



**An injury at a posted area could make YOU liable**

Ref: [http://www.hawaiweb.com/oahu/beaches/waimea\\_bay\\_beach\\_park.htm](http://www.hawaiweb.com/oahu/beaches/waimea_bay_beach_park.htm)

**FOR OFFICIAL USE for any medical or**



# Sandy Beach

## “Oahu’s Most Dangerous”

- **Sandy Beach is #1 in shore break injuries.**
  - **“Duck Diving” to go under a wave causes 15% of the neck injuries.**
  - **Averages 9-14 neck injuries each year.**
  - **91% occur in less than 3' of water.**
  - **94% of the injuries involved impact with the head or neck with the bottom.**
  - **More necks are broken at Sandy than all other Oahu beaches combined.**
  - **Average salt sea water weighs 64 lbs/cuft, average human body 4-6 cuft. Water weight striking the body **250-400 pounds.****



# Body Surfing/Diving into waves



- A surfer wipes out at Sandy Beach, risking a paralyzing neck injury, NOT something you want to try for the first time
- 16 March 1998 - 17 Y/O Jonathan Yap was body surfing with a friend. He dove into the water and struck a sandbar with his head. The impact left him a quadriplegic, paralyzed from the neck down.
- 2011 8<sup>th</sup> TSC SSG at Hale Koa Beach during his in-processing period with his two daughters dove into the water and struck a sandbar with his head. The impact left him a quadriplegic, paralyzed from the neck down.



# Sandy Beach Dangers



**“She was just going to take sand out of her bathing suit,” in ankle deep water, said lifeguard Noa Spencer**

**“Sandy Beach requires a great deal of expertise, even experts get hurt”**

**Don't believe when you see a 10 year old local child busting the waves, you CAN. That child was probably in the water before they could walk!!!**

**FOR OFFICIAL USE**



# Sandy Beach Dangers

- To use the analogy of ski slopes.. **“It’s a double black diamond run”!!!**
- In 2000, there was an average of one rescue for every 3,000 people who visited Sandy Beach.
- By comparison, about 58,000 people sunned and swam at Waikiki before one needed a rescue.
- To put it another way, only 3 percent of the people who went to the beach on Oahu in 2000 went to Sandy Beach, yet 16 percent of the rescues were there.
- <http://archives.starbulletin.com/2002/03/24/news/story3.html>

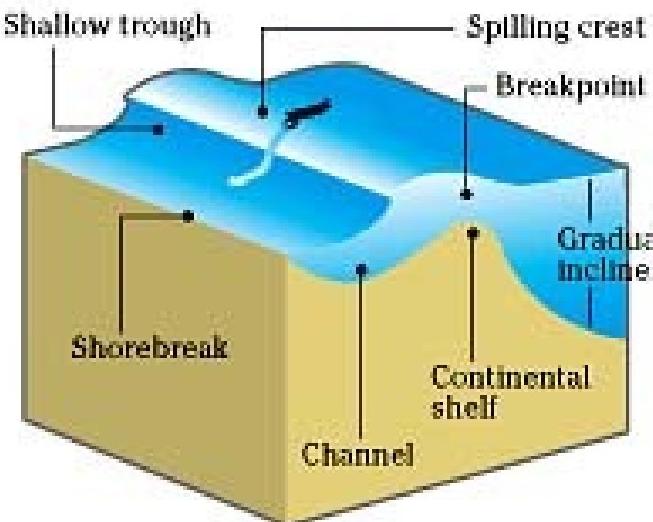


# Sandy Beach Dangers

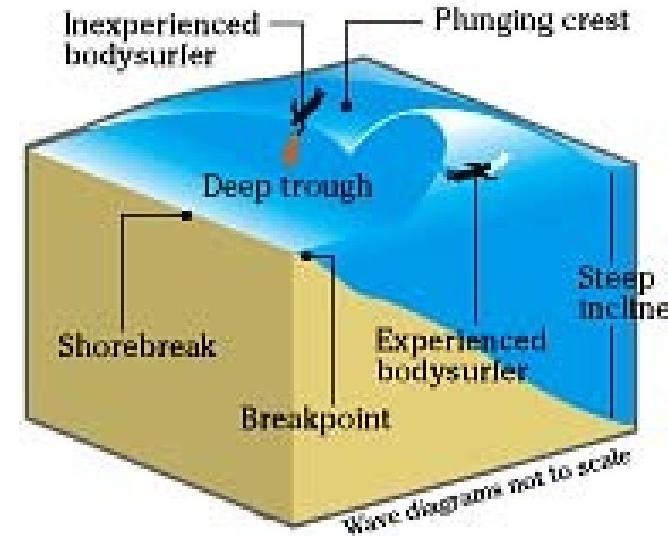
## Deep blue to shallow sand

Sandy Beach is similar to Hawaii's other southeast-facing beaches. This is because the ocean floor rises quickly from the depths of the Molokai Channel to shallow water. The water is more than 120 feet deep just one mile from the beach. This creates a phenomenon where high-energy waves from the deep ocean have little time to dissipate by the time they reach shore. This contrasts sharply with beaches on the mainland for several important reasons. Hawaii's beaches have no continental shelf as do beaches in Florida and California, so there is no slowing action and energy reduction to the swells. This means that Hawaii gets many unforgiving "plunging" waves, as opposed to the mainland's less powerful "spilling" waves. Adding to this effect is the fact that Sandy Beach has no protective offshore fringing reef, unlike other beaches in Hawaii. All of these factors contribute to the many injuries suffered at Sandy Beach.

### "Spilling" mainland waves



### "Plunging" Hawaii waves





# Surfing Helmets Save Lives

- **Nov 17, 06 - Tamayo Perry, an experienced big wave surfer, suffered two serious injuries while surfing. A wipeout pushed him into the ocean floor where he suffered a serious blow to his head. Another surfer's board ripped a long gash to his head, requiring more than 50 stitches to patch. The injury kept him out of the water for weeks.**
- **Feb 9, 06 - Surfing photographer Jon Mozo paid the ultimate price at the pipeline. The waves were pumping that day while he was taking pictures. He drowned after either hitting his head on a reef or from a collision with a surf board.**



# Surfing Helmets Save Lives



- **Feb 9, 06 - Fellow surfing photographer Larry Haynes had his own close call when a wave slammed him so hard on the reef the helmet he had on was totally shattered. Fortunately his helmet took the blow, not his head. “Sometimes we forget just how dangerous surfing can be. Maybe wearing a helmet at Pipeline isn't such a bad idea after all,” Larry said.**
- **Helmets can protect surfers from critical injuries and even death. At Surf and Sea in Haleiwa, they sell more helmets to skydivers and surf photographers than to surfers**





# Safe Surfing

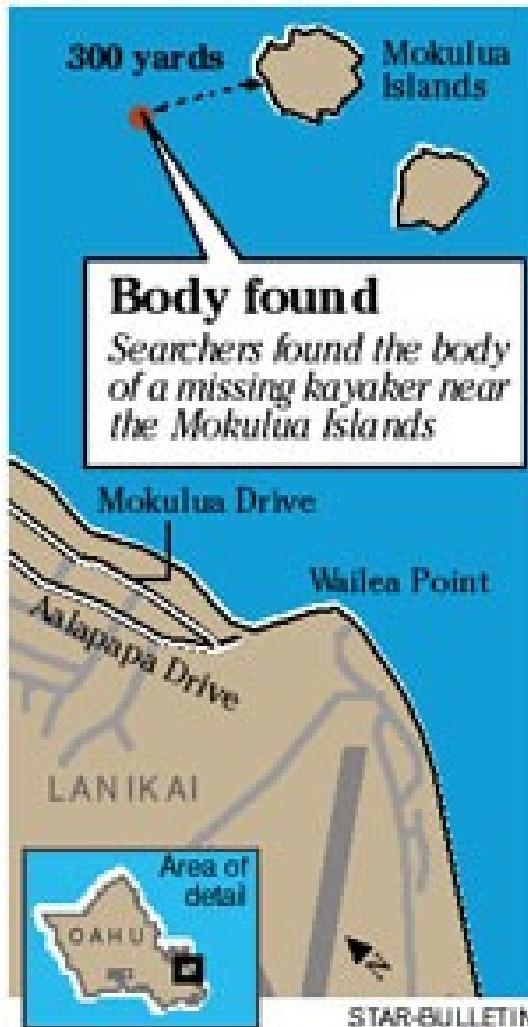
## Soft Fins & Nose Tips Save(at least) Skin



- **Chuck was surfing Ocean Beach when he wiped out. While in the wash he felt the fin slice clean through the arch of his foot, opening it all the way to the Fascia Tendon, the white part you see exposed. Cut that and you loose control of your foot. Beneath that is the femoral artery. Cut that and you can bleed to death in minutes.**



# Missing Kayaker's Body Found Off Lanikai



- **KAILUA — Dec 6, 05 - Rescuers yesterday found the body of a 49 - year old Air Force reservist from California, Johnny Yu, who fell off a rented kayak after it was hit by a wave off Lanikai on Monday.**
- **Yu and a 26-year-old woman from the same Reserve unit rented a tandem kayak from Hawaiian Watersport on Monday morning, and were with a guide when a wave capsized their kayak as they returned from the Mokulua islets.**
- **The woman said neither she nor Yu were wearing life jackets when the accident occurred. According to CPT Kane, HFD, Yu's body was found within 150 yards of where he was last seen, near reefs on the Kane'ohe side of the Mokuluas**



# Kayaking Safety

- If this is your first time kayaking, ask for assistance.
- Ask how to use the kayak and how to control it?
- If a guide or an experienced kayaker is available, try to join them.
- First timers should not kayak alone or with ONLY other inexperienced kayakers.
- Always wear a life jacket or other USCG approved Personal Flotation Device.
- Strong swimmers don't give credit for that when capsizing, it quickly turns into a panic situation.
- Wear a protective helmet. Rolling over in shallow water can result in your head striking an elevated reef. (The reef always wins this battle)
- Ensure you tell the rental company, where you are planning to go.
- They should give you a safety briefing on water conditions for that area, if they don't get a briefing from someone BEFORE setting out.
- Dangerous water areas are generally "Off Limits" to renters.



# Oahu's Safer Beaches

## OAHU

### Beach Hazard Ratings – ALWAYS USED GUARDED BEACHES

These are recommended hazard levels based on the average of the reported face height range. National Weather Service Surf Forecast.

➤ Beach and nearshore means the beach and surf zone ~50 to 100 yd.

Offshore means for kayakers, windsurfers, etc. located outside the ~50 to 100 yd surf region.

### NORTH SHORE

#### WAVES - Breaking Face Height Forecast – N, NW

WINDS - Offshore sign goes to RED at 15 kt, BLACK at 25 kt

Location	Breaker Face Height ft	0-1 "0-1"	1.1-3.0 "1 to 4"	3.1-4.0 "3 to 5"	4.1-5.0 "4 to 6"	5.1-6.0 "5 to 7"	6.1-7.0 "6 to 8"	7.1-8.0 "7 to 9"	8.1-9.0	9.1-15.0	>15.1
North Shore Haleiwa to V-land	Beach and nearshore	Caution		High Hazard				Extreme Hazard			
	Offshore	Caution		High Hazard				Extreme Hazard			
North Shore Sunset Guard Stand	Beach and nearshore	Caution		High Hazard				Extreme Hazard			
	Offshore	Caution		High Hazard				Extreme Hazard			
North Shore Alii Guard Stand	Beach and nearshore	Caution		High Hazard				Extreme Hazard			
	Offshore	Caution		High Hazard				Extreme Hazard			

7 pages of Hazard Matrices including Oahu, Maui, Kauai & Big Island at:  
<http://oceansafety.soest.hawaii.edu/about/matrix.asp>



# Oahu's Safer Beaches Chinaman's Hat



**Located on the Windward side. Scene of 2011 double Army fatality discussed earlier. At low tide you “can walk” to the island, at high tide you will be swimming, and better be a strong swimmer. Nearby channels are frequented by large sharks!!**



# Hanauma Bay

Dangerous areas



Dangerous areas

**Hanauma Bay is a great place to enjoy the island's sea life if you stay in the safe center area. Be sure to heed discussion about securing your valuables.**



# Oahu's Safer Beaches

- **Military Beaches when lifeguards are present - Bellows, Hickam, Marine Corps Base HI (KBAY).**
- **Local Beaches - Hanauma Bay, Ala Moana Park, The Waterfront at Puulola, any beach with life guards posted.**
- **Always ask the life guards about how safe a beach is BEFORE you enter the water, learn where the hazards are located, and OBEY warning signs!!!**

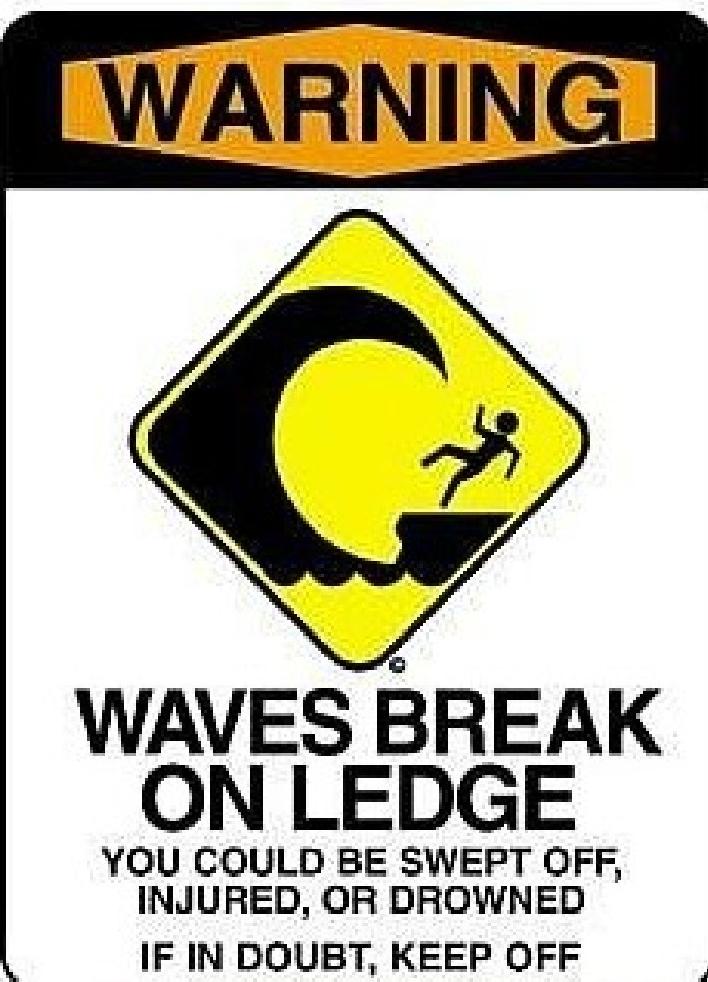


# Beach Hazard Signs





# Beach Hazard Signs



- **Warning Level:** **DANGEROUS . . .** a potential for *loss of life or limb* exists.
- **Condition Description:** These are large waves originating from deep water breaking on rocky ledges and shoreline. However, this condition can occur suddenly, unexpectedly even when the water appears to be calm.
- Lava is very porous and it crumbles easily. Don't ever go onto the wet **rocky zone**. The ocean is unpredictable and has washed hundreds of people away!
- Once in the water, very strong currents are usually present at these locations.



# Waves Breaking on Ledges

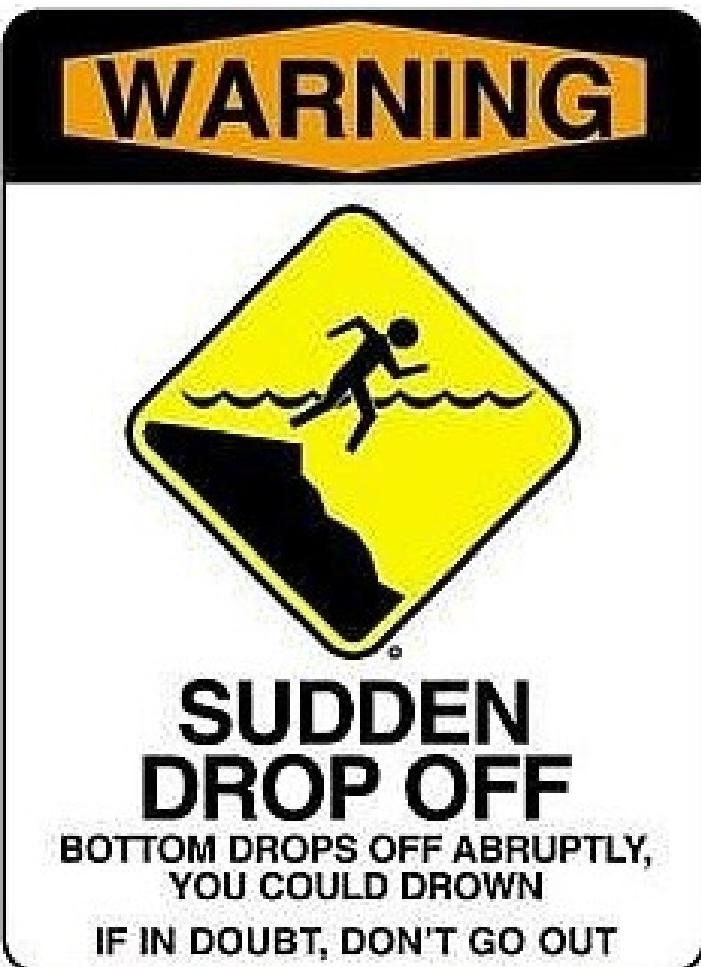


**Is this a SAFE place to stand? One slip, one large wave.....and he's flushed by mother nature.**

**Never turn your back to the ocean while walking these areas.**



# Beach Hazard Signs



- **Warning Level:** **HAZARDOUS**
- **Condition Description:** O'ahu is an Island and its beaches and reefs do not extend a long distance as other beach areas do. The "shelf" of the Island rapidly begins to decline and waters become very deep within short distances from the shore.
- **Comments:** There are deep holes and caves close to shoreline caused by collapsed lava tubes or naturally occurring conditions. Even experienced swimmers and divers have been "sucked" in - especially during fast currents and high waves.



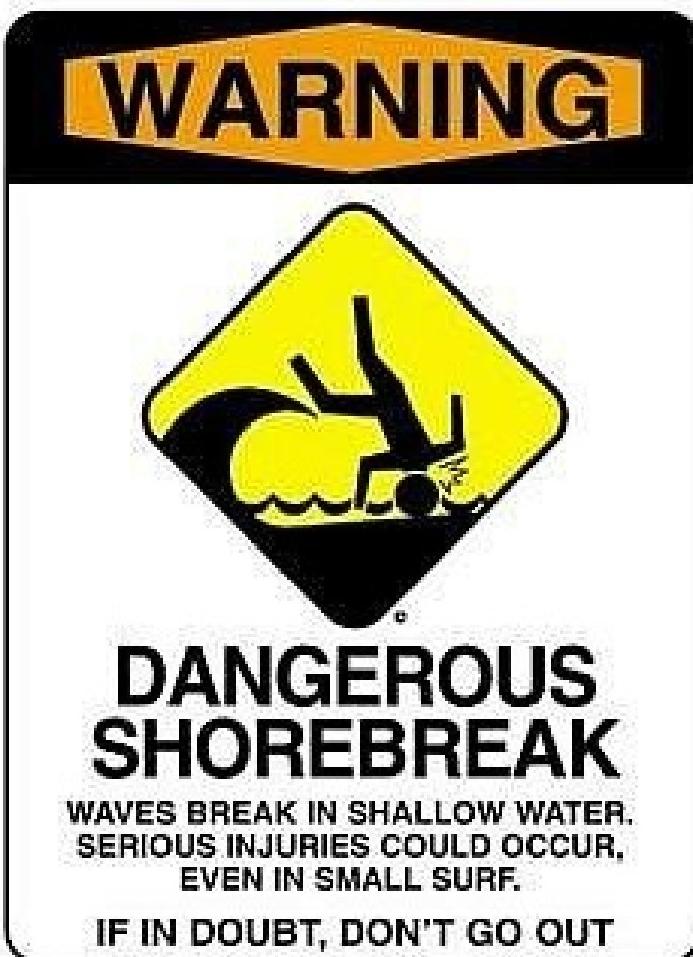
# Beach Hazard Signs



- **Condition Description:** These are swift moving channels of water against which it is difficult to swim. Strong currents frequently accompany high surf and rapid tide changes and can be recognized as a turbulent channel of water between areas where waves are breaking.
- **Comments:** When caught in a strong current -- Try to keep a level head, i.e., don't panic! **Swim diagonally to the current, not against it.** Lifeguards will use their jet ski w/trailer to come out and rescue you.



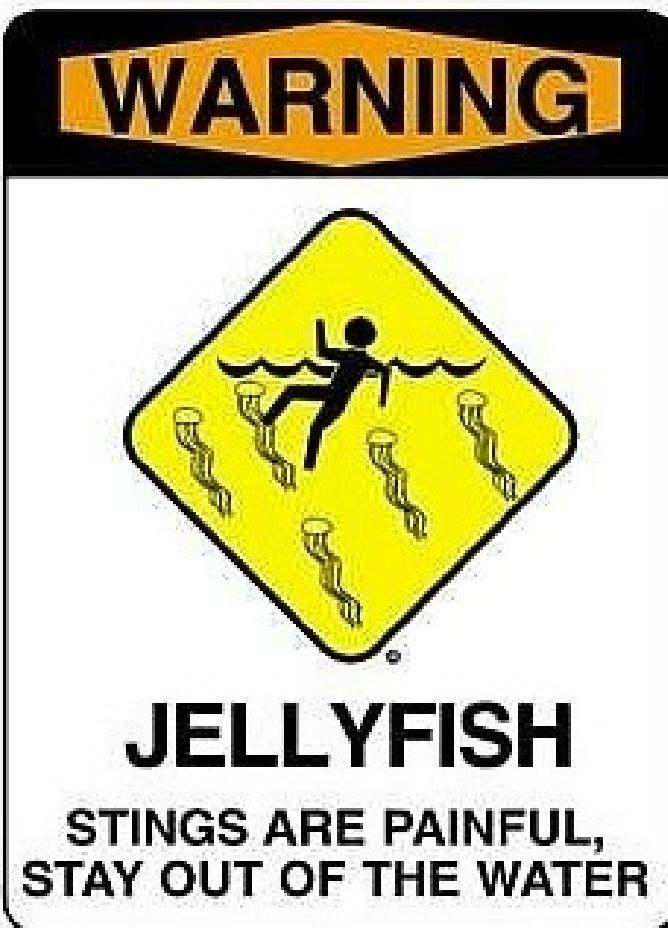
# Beach Hazard Signs



- **Warning Level: *HAZARDOUS***
- **Condition Description:** This is the condition when waves break directly on the shore. Shore breaks are unpredictable and dangerous. They have caused many serious neck and spinal injuries to both experienced and inexperienced bodysurfers and swimmers.
- **Sandy Beach is the most notable of these areas.**
- **Be sure to ask a lifeguard about the wave conditions at the beach you're enjoying.**



# Beach Hazard Signs



- **Warning Level: HAZARDOUS-DEADLY**
- **Condition Description:** Often offshore winds blowing into the shore combine with ocean currents to "push" jellyfish - to the shore. This is especially so nine to ten days after the full moon, when box jellyfish - *Carybdea alata* - "swarm" in Hawai`i. Jellyfish stings can be quite painful and even life threatening for some.
- These stings cause anaphylactic shock in some persons. **IMMEDIATE MEDICAL ATTENTION MAY BE REQUIRED!** Contact lifeguards if you need medical assistance.



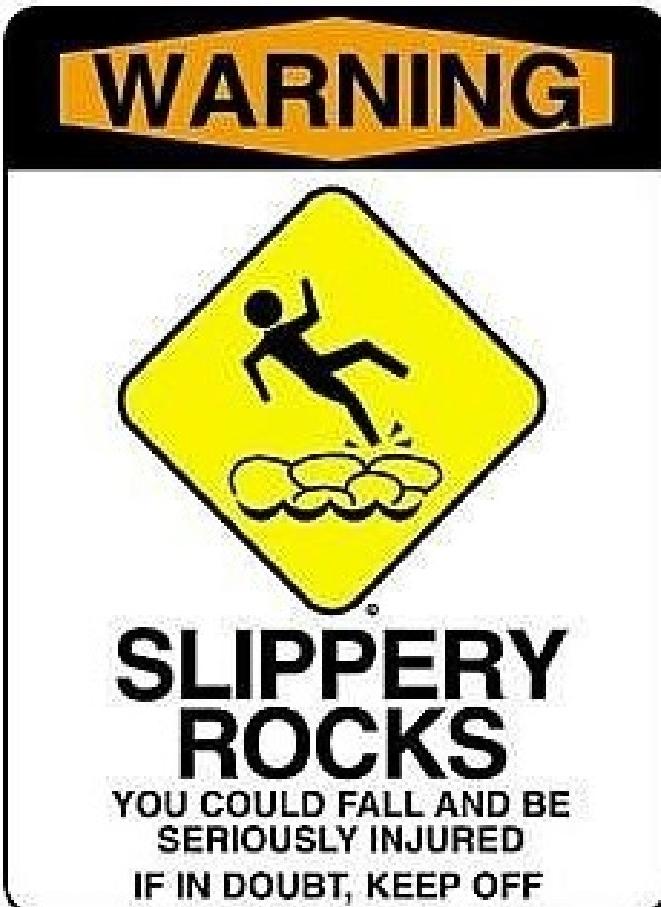
# Beach Hazard Signs



- **Warning Level: HAZARDOUS-DEADLY**
- **Condition Description:** Often offshore winds blowing into the shore combine with ocean currents to "push" stinging blue "jellies" - the Portuguese Man-of-War or "Bluebottle" - to the shore. The stings of these "jellies" can be quite painful and even life threatening for some.
- **These stings cause anaphylactic shock in some persons. IMMEDIATE MEDICAL ATTENTION MAY BE REQUIRED! Contact lifeguards if you need medical assistance.**



# Beach Hazard Signs



- **Warning Level: HAZARDOUS**
- **Condition Description:** Naturally occurring shore rocks become very slippery. Waves hitting a person on slippery rocks equal a potential fall and resulting injury or other trauma.
- **Don't ever go into the wet rocky zone. The ocean is unpredictable and has been known to wash people away.**



# Beach Hazard Signs



- **Warning Level: HAZARDOUS**
- **Condition Description: Most of Hawaii's beaches have sharp coral reefs close to the shoreline. Use caution when swimming in shallow reef areas. Foot protection is advised.**
- **Should coral become embedded deeply, see your doctor as soon as possible to have it removed. Deep cuts should be attended to by a physician to avoid the risk of infection. If you're tide pooling or reef walking wear protective foot gear.**



# Where Are The Hazards?



Did You Find Them?



# Snorkeling Hazards



- **Warning Level: HAZARDOUS**
- Requires above average;
  - Physical Conditioning
  - Swimming Ability
- You CANNOT breathe water, improper use of the snorkel can cause you to take a full “breath” of water, what’s next PANIC!
- Given the currents surrounding the Hawaiian islands, your next stop could be Chile!!!
- Start slow, in safe areas with lifeguards present.



# SCUBA Hazards

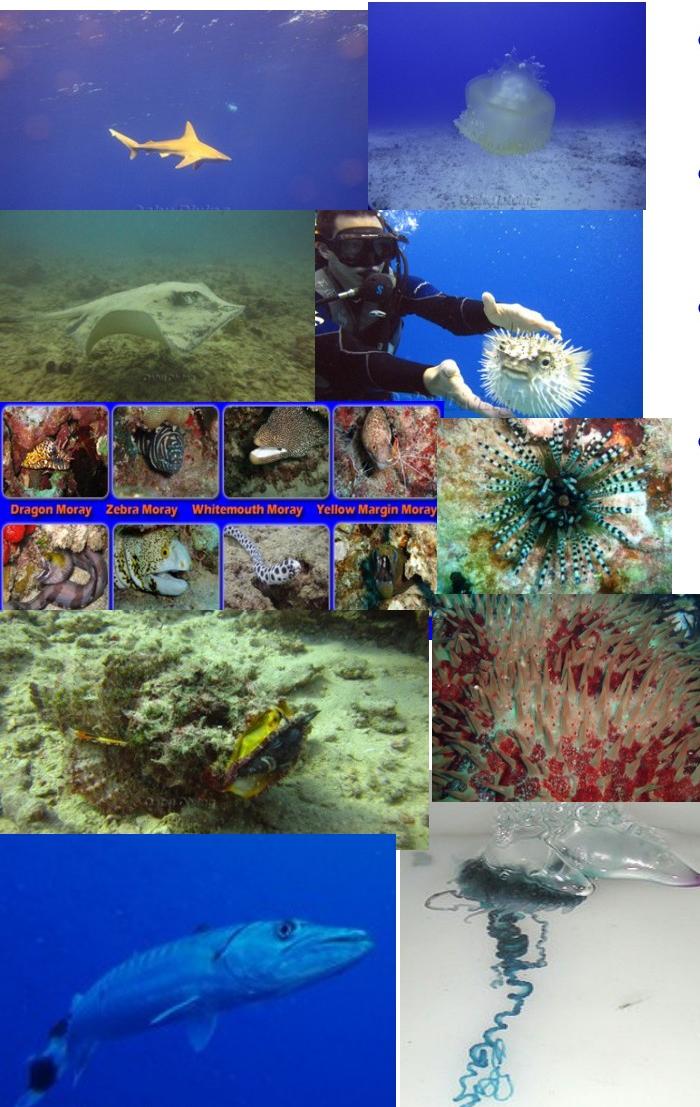


- **Warning Level:**  
**HAZARDOUS**
- **Requires above average;**
  - Physical Conditioning
  - Swimming Ability
- **You CANNOT breathe water**
- **Learn SCUBA from a reputable source.**  
Several HI dive groups have “lost” divers.
- **2011, Soldier died while scuba diving on Kauai during his R&R period**





# Marine Life Hazards



- **Warning Level: *HAZARDOUS* to *DEADLY!!!***
- **The hazardous creatures in the sea are too numerous to list here.**
- **Your best bet is not to touch anything, but watch out for everything.**
- **Common creatures you can expect to interact with are;**

**Box Jelly Fish  
Blue Bottle or  
Portuguese Man o' War  
Urchins  
Crown of Thorns  
Starfish**

**Scorpion Fish  
Sting Rays  
Puffer fish  
Moray Eels  
Stone Fish  
Sharks**

<http://www.aloha.com/~lifeguards/critters.html>

**OR OFFICIAL USE**



# Review-General Water and Safety Tips

- Learn to swim. The best thing you can do to stay safe in and around water is to learn to swim.
- Swim in areas supervised by a lifeguard. Read and obey all rules and posted signs.
- Children or inexperienced swimmers should take precautions, such as wearing a U.S. Coast Guard-approved personal flotation device when around the water.
- Don't swim if you have the TOOs-too tired, too cold, too much sun, too much strenuous activity.
- Set water safety rules for the whole family based on swimming abilities. For example-inexperienced swimmers should stay in water less than chest deep.
- Be knowledgeable of the water environment you are in and its potential hazards, such as deep and shallow areas, currents, obstructions and where the entry and exit points are located.
- Pay attention to local weather conditions and forecasts. Stop swimming before bad weather.
- Enter feet-first entry when jumping in the water. NEVER HEAD first the first time. That's how you'll leave in the ambulance.
- Enter headfirst only when the area is clearly marked for diving and that have no obstructions.
- Do not mix alcohol with swimming, diving or boating. Alcohol impairs your judgment, balance and coordination, affects your swimming and diving skills, and reduces your body's ability to stay warm.
- Know how to prevent, recognize, and respond in emergencies.

<http://www.hawaiislifeguardwatersafetyfund.org/safety-tips/>



# Conclusion Comments or Questions

## References

**The following information sources were used in creating these safety slides:**

- **Honolulu Advertiser**
- **Honolulu Star Bulletin**
- **Hawaii State Life Guards**
- **KGMB Channel 9**
- **KITV Channel 4**
- **<http://oceansafety.ancl.hawaii.edu/v/2.0/?cat=safety>**
- **<http://www.hawaiislifeguardwatersafetyfund.org>**
- **<http://www.aloha.com/~lifeguards/critters.html>**
- **516th Signal Brigade Oahu Hazards**